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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/447,052	11/23/1999	SEISHI SUEHIRA	1075.1124/JD	3304

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EXAMINER	
NGUYEN, CHAU T	

ART UNIT	PAPER NUMBER
2176	

DATE MAILED: 10/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/447,052	SUEHIRA, SEISHI	
	Examiner	Art Unit	
	Chau Nguyen	2176	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE ____ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *11 July 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-63* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-63* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *04/13/06 & 07/11/06*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. Applicant's amendment filed on 07/11/2006 has been entered. Claims 1-63 are pending.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. **Claims 1-62** are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Number 6,377,956 B1 to Hsu et al., issued April 23, 2002, filed February 22, 1999 in view World Wide Web Consortium, *XML Schema Part I: Structures,* W3C Working Draft (May 6, 1999), and further in view of Patent Number 6,014,680 to Sato et al., issued on January 11, 2000, filed on August 29, 1996.

Regarding **independent claims 1, 49, and 56**, Hsu et al. teach setting in advance one original document storage file-system directory for storing the plurality of non-structured documents inasmuch as they teach specifying database tables or

external files for the storage of component documents. (Hsu et al., col. 3, lines 20-44 and col. 7, lines 26-32: the component document retriever for storing the component documents in various subdirectories of a machine-specific directory) Hsu et al. also teach setting in advance a structured document file-system directory area for storing a plurality of structured documents obtained by conversion of the plurality of non-structured documents. (Hsu et al., col. 8, lines 16-18: "In the media preparation process, all source documents are processed and converted into standard formats, in particular, SGML, and are stored in the document database.")

Further, Hsu et al. teach converting the plurality of non-structured documents into the plurality of structured documents and storing the plurality of structured documents into the structured document file-system directory. (Hsu et al., col. 3, lines 20-44 and col. 8, lines 16-18.)

However, Hsu et al. do not explicitly disclose storing, each time one of the plurality of non-structured document to be included in the hub document format structured document is prepared or edited, the one of the plurality of non-structured document into the original document file-system directory. Sato et al. that teach a system comprise a hard disk 2 including a non-structured document repository 21 (original document file-system directory) for storing non-structured document and a structured repository 23 (structured document file-system directory) for storing generated structured document, and the system also comprises an input/display device for receiving from a user a non-structured document, which is then stored in the non-structured document repository 21, and convert a non-structured document stored in the

non-structured document repository 21 into a structured document and store the generated structured document in the structured document repository 23 (Sato, col. 6, line 66 – col. 7, line 35 and Fig. 19). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to interpret that in order to convert non-structured document stored in the non-structured document repository into structured document, there must be a storing step for storing a non-structured document in a non-structured document repository before the converting step can happen. By converting a non-structured document into a structured document, it would provide a better form (structured document) for users.

Further, Hsu et al. disclose a configuration process that assembles a set of related product documents may be automated more efficiently and effectively (col. 7, line 33 – col. 8, line 25). However, Hsu et al. do not teach acquiring document names of each of the plurality of structured documents and preparing corresponding entity declarations referring to each of the plurality of structured documents stored in the structured document file-system directory. However, *XML Schema Part I* teaches in section 3.6.2 on page 38 external parsed entities, "a feature of XML that offers a method for including well-formed XML document fragments, including text and markup, by direct reference to the storage object of the parsed entity." Further, in the example at the top of page 39, *XML Schema Part I* depicts entity declarations containing the names of structured documents. One of ordinary skill in the art would have recognized that these entity declarations provide a straightforward and efficient way to refer to component documents, and therefore, it would have been obvious to one of ordinary

skill in the art to extend Hsu et al. to acquire document names of the structured documents and prepare entity declarations for referring to entities of the structured documents.

Further, Hsu et al. disclose do not teach automatically adding entity the declarations to the hub document responsive to the presence each of the structured documents in the structured document file-system directory. However, *XML Schema Part I* in the example in section 3.6.2 on page 39 depicts a hub document based on the entity declarations regarding the structured documents. Moreover, one of ordinary skill in the art would have recognized that basing a hub document on the entity declarations would have provided the benefit of flexible and efficient document production, allowing reuse of components in different documents and ensuring that the most up-to-date versions of components were used. Therefore, it would have been obvious to one of ordinary skill in the art to prepare the hub document based on the entity declarations regarding the structured documents.

Regarding **dependent claims 2, 50 and 57**, Hsu et al. teach an attachment file storage area set in advance, and storing attachment files into the storage directory, inasmuch as they teach the original file storage directory as discussed above regarding claim 1 and further state that "[m]edia files, which are also document objects, are also managed in the same way as component documents." (Hsu et al., col. 3, lines 20-44 and col. 7, lines 25-26.) Further, Hsu et al. do not teach preparing entity declarations for the attachment file or preparing the hub document based on the entity declarations for the attachment files as well as the entity declarations for the structured documents,

but these elements would have been obvious to one of ordinary skill in the art in view of *XML Schema Part I* under the same rationale stated above regarding claim 1 for the obviousness of creating entity declarations and preparing the hub document based on the entity declarations regarding the structured documents.

Regarding **dependent claims 3, 51 and 58**, the rejection of claim 2 above is fully incorporated herein. Further, Hsu et al. do not teach setting in advance an entity declaration storage directory. However, in view of the obviousness of using entity declarations, discussed above regarding claim 1, it further would have been obvious to one of ordinary skill in the art to have set in advance an entity storage area because one of ordinary skill would have recognized the benefit of having a central storage area from which entity declarations could be accessed and used for multiple documents.

Regarding **dependent claims 4-6, 52 and 59**, Hsu et al. do not teach the entity declarations of the structured documents having file names corresponding to the file names of the original unstructured document. However, one of ordinary skill in the art would have recognized that giving entity declarations the same names as the original unstructured document would have had the benefit of making clear to what original document the entity declaration referred, and therefore the step recited in these claims would have been obvious to one of ordinary skill in the art.

Regarding **dependent claims 7-12, 53 and 60**, Hsu et al. do not teach the entity declarations for the attachment files having file names corresponding to the file names of the non-structured documents to which the attachment files are attached. However, one of ordinary skill in the art would have recognized that giving attachment entity

declarations the same names as the original unstructured document would have had the benefit of making clear to what original document the attachment was attached, and therefore the step recited in these claims would have been obvious to one of ordinary skill in the art.

Regarding **dependent claims 13-24, 54 and 61**, Hsu et al. teach the attachment files being graphic files including graphic information. (Hsu et al., col. 7, lines 61-65: "For each component document, the author also prepares for all needed multimedia files for diagrams, images, drawings, etc. in some standard formats such as CGM, TIFF, GIF, etc., which may be incorporated in the SGML files.")

Regarding **dependent claims 25-48, 55 and 62**, Hsu et al. teach that the structured documents a Standard Generalized Markup Language (SGML) documents whose structure is defined by a Document Type Definition (DTD). (Hsu et al., col. 7, lines 33-37: "Component documents are preferably represented in SGML (See SGML: Standard Generalized Markup Language, ISO/IEC 8879:1986). SGML is a meta-language for defining document structures, referred to as Document Type Definition (DTD). An SGML document structure is an instance of its associated DTD.")

4. **Claims 63 is** rejected under 35 U.S.C. 103(a) as being unpatentable over Patent Number 6,014,680 to Sato et al., issued on January 11, 2000, filed on August 29, 1996 in view World Wide Web Consortium, *XML Schema Part I: Structures,* W3C Working Draft (May 6, 1999).

Regarding **independent claim 63**, Sato et al. teach a hub document preparation method, comprising:

manually placing unstructured document files in a pre-determined file-system directory (col. 7, lines 2-35: an input/display device 1 receives an input entered by a user an input non-structured document, which is stored in a non-structured document repository 21);

when preparing the hub document, automatically responding to the presence of the unstructured document files in the pre-determined directory by converting the unstructured document files to corresponding structured document files, where structure of the structured documents is given by markup tags included therein (Abstract, col. 7, lines 2-35: the structured document generating process 35 is a process of converting a non-structured document stored in the non-structured document repository 21 into a structured document, which is an SGML document, and it's well-known that the SGML document must have markup tags included therein);

determining structured documents to be referenced in the hub document by automatically acquiring a list of filenames of the respective structured document files in the pre-determined file-system directory (col. 3, lines 32-58: a structured document explicitly given the document structure, in accordance with a document structure definition (filename) defining the document structure), where but-for the presence of the structured documents in the pre-determined file system directory they would not be referenced in the hub document and where the presence of the structured documents in

the pre-determined file-system is what determines that they are to be referenced in the document directory (col. 3, lines 32-58 and col. 7, lines 2-35); and

However, Sato et al. do not teach preparing corresponding entity declarations referring to the structured documents. However, *XML Schema Part I* teaches in section 3.6.2 on page 38 external parsed entities, "a feature of XML that offers a method for including well-formed XML document fragments, including text and markup, by direct reference to the storage object of the parsed entity." Further, in the example at the top of page 39, *XML Schema Part I* depicts entity declarations containing the names of structured documents. One of ordinary skill in the art would have recognized that these entity declarations provide a straightforward and efficient way to refer to component documents, and therefore, it would have been obvious to one of ordinary skill in the art to extend Sato et al. to acquire document names of the structured documents and prepare entity declarations for referring to entities of the structured documents.

Further, Sato et al. disclose do not teach adding entity the declarations to the hub document responsive to the presence of the structured documents in the structured document file-system directory. However, *XML Schema Part I* in the example in section 3.6.2 on page 39 depicts a hub document based on the entity declarations regarding the structured documents. Moreover, one of ordinary skill in the art would have recognized that basing a hub document on the entity declarations would have provided the benefit of flexible and efficient document production, allowing reuse of components in different documents and ensuring that the most up-to-date versions of components were used.

Therefore, it would have been obvious to one of ordinary skill in the art to prepare the hub document based on the entity declarations regarding the structured documents.

Response to Arguments

In the remarks, Applicant argued in substance that

A) "Hsu et al. (hereinafter 'Hsu') and XML Schema Part I are totally silent with regards to setting in advance one structured document file-system directory storing a plurality of structured documents obtained by conversion of the plurality of non-structured documents; and preparing a single hub document format structured document from a plurality of structured documents stored in one structured documents file-system directory."

In reply to argument A, Hsu et al., teach in col. 3, lines 20-44 and col. 7, lines 26-32: the component document retriever for storing the component documents in various subdirectories of a machine-specific directory). Hsu et al., col. 8, lines 16-18: "In the media preparation process, all source documents are processed and converted into standard formats, in particular, SGML, and are stored in the document database. In the same field of endeavor, Sato et al. that teach a system comprise a hard disk 2 including a non-structured document repository 21 (original document file-system directory) for storing non-structured document and a structured repository 23 (structured document file-system directory) for storing generated structured document, and the system also comprises an input/display device for receiving from a user a non-structured document,

which is then stored in the non-structured document repository 21, and convert a non-structured document stored in the non-structured document repository 21 into a structured document and store the generated structured document in the structured document repository 23 (Sato, col. 6, line 66 – col. 7, line 35 and Fig. 19).

B) "The cited portions of XML Schema Part I make no mention of adding entity declarations to the hub document. In fact, XML Schema Part I does not even discuss whether its document fragments are grouped together automatically, responsive to the presence of such document fragments." (see page 14 of the Remarks)

In reply to argument B, *XML Schema Part I* teaches in section 3.6.2 on page 38 external parsed entities, "a feature of XML that offers a method for including well-formed XML document fragments, including text and markup, by direct reference to the storage object of the parsed entity." Further, in the example at the top of page 39, *XML Schema Part I* depicts entity declarations containing the names of structured documents. One of ordinary skill in the art would have recognized that these entity declarations provide a straightforward and efficient way to refer to component documents, and therefore, it would have been obvious to one of ordinary skill in the art to extend Hsu et al. to acquire document names of the structured documents and prepare entity declarations for referring to entities of the structured documents.

C) "Further, the Examiner has not taken into consideration the claim amendments filed September 27, 2005, in which the preambles of independent claims 1 and 56 were

amended to recite that the hub document preparation method/apparatus is for use in a computer system having a file system to manage data by storing the data in a file-system directory."

In reply to argument C, the recitation "the hub document preparation method/apparatus is for use in a computer system having a file system to manage data by storing the data in a file-system directory" has not been given patentable weight because the recitation occurs in the preamble. A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951).

5. Applicant's arguments filed 07/11/2006 have been fully considered but they are not persuasive. Please see the rejection and response to arguments above.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chau Nguyen whose telephone number is (571) 272-4092. The examiner can normally be reached on 8:30 am – 5:30 pm Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Heather Herndon, can be reached on (571) 272-4136. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306. On July 15, 2005, the Central Facsimile (FAX) Number will change from 703-872-9306 to 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Chau Nguyen
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William L. Bashore

WILLIAM BASHORE
PRIMARY EXAMINER